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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,375	08/01/2003	Mikio Uchida	AA540C	4170

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EXAMINER

CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,375

Applicant(s)

UCHIDA ET AL.

Examiner

Lakshmi S. Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of response dated 7-10-06 is acknowledged.

Claims 1 and 9-20 are pending in the instant application.

The following rejection of record has been maintained:

Claim Rejections - 35 USC § 103

1. Claims 1, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,538,720 ('720) in view of US 6,540,989 ('989).

'720 teach an anhydrous composition for hair treatment, particularly hair condition effect, comprising two components that are separated until use and which when mixed with water generates heat (col. 2, lines 38-42). The first component of '720 comprises a physiologically compatible salt that generates heat upon mixing with water and a thickening agent, and the second component comprises at least polyalcohol that is liquid at 25 degrees C (col. 1, lines 30-45). '720 teach that the salts are preferably chloride salts of calcium, magnesium and zinc, which read on the instant heat-generating component (col. 1, lines 43-57). For component B, '720 teach alcohols selected from the group consisting of polyethylene glycol, polypropylene glycol, glycerol, diglycerol etc (col. 2, lines 10-37). '720 further teaches addition of conditioning agents such as cationic polymers, film-forming agents. The examples listed in col. 3-4 of '720 also recite lactic acid, along with components such as jojoba oil, that meet the claimed acid and inert carrier respectively. While '720 fail to teach magnesium sulfate, '720 differs only in the salt form (magnesium chloride of '720 versus magnesium sulfate of

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the claims) and absent any unexpected result with the claimed sulfate form, it would have been within the scope of a skilled artisan to choose a magnesium sulfate or magnesium chloride for generating heat in the composition.

'720 fail to teach a phase changing agent that has a melting point of about 30 degrees C to about 60 degrees C. Instant specification describes that the phase changing agent having a certain melting point of the present invention can absorb a heat from the heat generating -agent by changing its phase from solid to liquid, and then, release the heat slowly by changing its phase from liquid to solid, prevent the compositions from warming up to a higher temperature than expected, and provide prolonged warming from the compositions, without using coated heat generating agents. In this regard, '720 also teach the same compounds as heat generating agent and further states that the heat generated by the heat-generating agent is at a temperature of 40 to 60 degrees c. Accordingly, it would have been within the scope of a skilled artisan choosing the second component (of '720) such that the component is capable of absorbing the heat, generated by the salts and further maintaining the heat for proper conditioning of the hair. However, '720 fail to teach the claimed stearyl alcohol, cetyl alcohol and mixtures thereof, and also fail to teach the claimed amidoamines.

'989 teach a self-warming hair care composition comprising a glycol, a quaternary ammonium compound, an amidoamines and a silicone. The composition of '989 is anhydrous and upon contact with water generates heat giving the user a

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pleasant feeling and also the conditioning ability (col. 1). '989 teach amidoamines (col. 3, lines 41-55; col. 5) and fatty alcohols (col. 4, lines 26-30; col. 5) that are also described in the instant specification. Further, '989 teach employing conditioner materials in the hair treatment composition, selected from the group consisting of silicones, amidoamines, fatty alcohols etc (col. 4, lines 12-15). In particular, '989 teach that the preferable fatty alcohols include stearyl alcohol, cetyl alcohol etc (col. 4, lines 22-30).

Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to add amido amines and fatty alcohols (cetyl, stearyl alcohols) conditioners of '989 to the composition of '720 and use the composition for hair care such as hair conditioning because '989 teaches that amido amines and fatty alcohols act as deposition aids and conditioners, and that a heat generating composition that is self-warming gives a warm feeling to use and also provides good conditioning because of amidoamine. Accordingly, the expected result would be to effectively condition hair as well as provide a warmth sensation to use indicating that the composition is working effectively. In this respect, the cetyl alcohol and stearyl alcohol have the same melting point as that claimed. With respect to the limitation "phase changing agent", while '989 fails to state the limitation the compounds possess the property. Further, with respect to the ratio of amidoamines and acid claimed, '989 teach that a clear conditioning composition is obtained with amino acid neutralized with acid. Accordingly, optimizing the ratio of amido amine and acid so as to obtain an effective conditioning effect.

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2. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,538,720 ('720) in view of US 6,540,989 ('989) and as applied to claims 1-8, 12-16, 18 and 20 above, and further in view of EP 027 730 (EP 730).

Claim 9-11 recite polyoxyalkylene derivatives.

'720 fail to specifically teach the claimed polyoxyalkylene derivatives of the instant claims.

EP '730 teaches cosmetic compositions for hair or skin treatment, comprising heat generating compounds when brought into contact with water (page 3). Among the heat generating compounds EP 730 teaches fatty alcohols, alkylene glycols and polyoxyalkylene derivatives (page 5, in particular lines 8-19 and page 6, lines 8 to page 7, lines 13). More specifically EP 730 teaches the claimed polyoxyethylene and polyoxypropylene copolymer (example 4 on page 12). Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the pluronic or any other suitable polyoxyalkylene derivatives as additional heat generating agents in the composition of '720 because EP 730 teaches that the above polyoxyalkylene derivatives are preferable as heat generating compounds (page 8) and suggests that the heat generating compounds give an excellent finishing and cleansing effect to the consumer upon application, which results in a comfortable hot feeling.

Response to Arguments

Applicant's arguments filed 7-10-06 have been fully considered but they are not persuasive.

Claims 1, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,538,720 ('720) in view of US 6,540,989 ('989).

Applicants argue that '720 fail to teach the claimed fatty alcohols (phase changing agents) such as cetyl alcohol, stearyl alcohol and mixtures thereof and the claimed amidoamines. It is argued that '989 teaches fatty alcohols as one of many possible conditioning ingredients in the final shampoo composition without specific examples. However, '720 desire the presence of a hair-conditioning agent (col. 2, L 38-42 & col. 3, L 1-3) and '989 teach the claimed fatty alcohols and amidoamines as conditioning agents. Further, '989 do not teach fatty alcohols as one of several possible combinations and instead specifically exemplify a combination of conditioning agents i.e., quaternary ammonium compounds (also taught by '720), fatty alcohols and amidoamines, in the self-warming hair care composition (table in col. 7, L 8-30; composition E in col. 10, L 15-30).

Applicants argue that '989 teaches fatty alcohols and amidoamines as deposition aides and conditioners and one of skill in the art would not be motivated to look to '989, in order to make the surprising discovery that by the use of the specific combination of phase changing agent and an inert carrier the present invention meets the need for preventing the composition from warming up to a higher temperature than expected. It is argued that '989 fail to provide any motivation to combine cetyl alcohol or stearyl

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alcohol with polyethylene glycol and magnesium sulfate. In response to this argument, it is to be noted that instant claims 1 and 12-19 are directed to a composition and not a method. Both '720 and '989 teach anhydrous hair compositions (shampoos or conditioners) that generate heat due to the presence of bivalent metal salts ('720) and polyalcohols ('989) as well as maintain the heat ('720). With respect to the method claim 20, both '720 and '989 teach the composition for hair conditioning employing the same step i.e., applying the composition to wet hair. Thus, the cited references are analogous, and accordingly the motivation to combine the teachings of '720 and '989 flows logically i.e., generating heat upon contact with water on the hair and thus resulting in improved penetration of active agents and conditioning of the hair. Further, in the absence of evidence to the contrary, the property or the function of phase changing is not separable from the fatty alcohols of '989. With respect to claimed magnesium sulfate, '720 generally teach bivalent metal salts of calcium, magnesium etc., preferably chloride salts of bivalent metals. However, in the absence of any unexpected result with the claimed sulfate salt of magnesium, one of an ordinary skill in the art would have readily recognized that bivalent metal salts (including magnesium sulfate) are suitable for generating heat upon contact with water.

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Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,538,720 ('720) in view of US 6,540,989 ('989) and as applied to claims 1-8, 12-16, 18 and 20 above, and further in view of EP 027 730 (EP 730).

Applicants argue that all of the claimed limitations are not taught or suggested in the cited prior art. Applicants' arguments regarding the teachings of '720 and '989 have been addressed in detail in the previous paragraphs. Applicants argue that EP '730 neither teach a phase changing agent nor teach the use of magnesium sulfate as heat generating agent. Applicants argue that claims 9-11 depend from claim 1 that recites the above features and hence there is no prima facie case of obviousness. Applicants' arguments are not persuasive because EP '730 has been cited for the teachings of the limitation of claims 9-11 (polyoxyalkylene derivatives) and not for the inorganic heat generating agents. The teachings of EPO are also analogous to that of US '720 and US '989 in that all three references teach a heat generating composition for treating hair and accordingly, one of an ordinary skill in the art would have been motivated to add the polyoxyalkylene derivatives of EP in the composition of US '720 because EP '730 teach the claimed polyoxyethylene and polyoxypropylene copolymer (example 4 on page 12), together with fatty alcohols and polyalcohols, for generating heat upon contact with water on the skin or hair, with an expectation to achieve an excellent finishing and cleansing effect to the consumer upon application, which results in a comfortable hot feeling.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -6.30 PM


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lakshmi S Channavajjala
Examiner
Art Unit 1615
September 11, 2006



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